

**REMARKS**

This Amendment is filed in response to the FINAL rejection mailed on March 16, 2007, and in the Request for Continued Examination (RCE) filed on even date herewith. All objections and rejections are respectfully traversed.

Claims 1-72 are in the case.

Claims 1, 16, 22, 28, 34, 39, 41, 44, 49, and 54 were amended to better claim the invention.

New Claims 69-72 were added to better claim the invention.

Applicant's undersigned attorney wishes to take this opportunity to thank the examiner for his kind consideration during the interview concerning the last Office Action.

**Request for Interview**

The Applicant respectfully requests a telephonic interview with the Examiner after the Examiner has had an opportunity to consider this Amendment, but before the issuance of the next Office Action. The Applicant may be reached at 617-951-3028.

At Paragraphs 3 – 28 of the Office Action Claims 1-14, 16-68 were rejected under 35 U.S.C. 102 as being anticipated by Permut.

Applicant's invention, as set out in representative claim 1, comprises in part:

1. A method for a storage operating system implemented in a storage system to optimize an amount of readahead data retrieved from a data container of the storage system, the method comprising:

receiving a client read request at the storage system, the client read request indicating client-requested data for the storage operating system to retrieve from the data container;

determining whether the storage operating system is permitted to retrieve read-ahead data from the data container in response to the received client read request;  
if it is determined that the storage operating system is permitted to retrieve read-ahead data from the data container, performing the steps of:

(i) *locating one or more readset data structures associated with the client-requested data and establishing a read stream corresponding to each readset data structure of the one or more readset data structures;*

(ii) *selecting an amount of readahead data to retrieve from the data container based on a plurality of factors stored within a readset data structure of the one or more readset data structures; and*

(iii) *retrieving the selected amount of readahead data from the data container.*

Permut discloses a method for detecting and remembering sequential access patterns for the purpose of prestaging tracks ahead of the current access request. Prestaging tracks is based on sequential hints and if current access is a continuation of a list entry. In other words, prestaging is based on commands in Permut.

Applicant respectfully urges that Permut has no disclosure of Applicant's claimed novel

(i) *locating one or more readset data structures associated with the client-requested data and establishing a read stream corresponding to each readset data structure of the one or more readset data structures;*

(ii) *selecting an amount of readahead data to retrieve from the data container based on a plurality of factors stored within a readset data structure of the one or more readset data structures; and*

(iii) *retrieving the selected amount of readahead data from the data container.*

Particularly, Applicant respectfully urges that Permut has no disclosure of Applicant's claimed *locating one or more readset data structures associated with the client-requested data and establishing a read stream corresponding to each readset data structure of the one or more readset data structures.*

Permut simply analyzes commands to achieve his read ahead operation.

In sharp contrast, Applicant claims *locating one or more readset data structures associated with the client-requested data and establishing a read stream corresponding to each readset data structure of the one or more readset data structures*.

Accordingly, Applicant respectfully urges that Permut has no disclosure of Applicant's claimed novel *locating one or more readset data structures associated with the client-requested data and establishing a read stream corresponding to each readset data structure of the one or more readset data structures*.

As the Examiner points out in Paragraph 2 of the Office Action, "Any such use of commands or flags requires some format or organizational scheme of the data (of the commands or flags) to be recognized so that the data therein may be used as desired."

Applicant respectfully urges that Permut has no disclosure of Applicant's claimed readset data structures, and clearly has no disclosure of Applicant's claimed *one or more readset data structures associated with the client-requested data and establishing a read stream corresponding to each readset data structure of the one or more readset data structures*.

The rejection was based more on "common sense" than on actual disclosure by Permut. Applicant respectfully urges that there is clearly no disclosure of Applicant's claimed novel *one or more readset data structures associated with the client-requested data and establishing a read stream corresponding to each readset data structure of the one or more readset data structures*.

At Paragraph 29 of the Office Action Claim 15 was rejected under 35 U.S.C. 103 as being unpatentable over Permut and further in view of Vishlitzky et al. U. S. Patent 5,649,156.

Applicant respectfully notes that Claim 15 is dependent from an independent claim which is believed to be in condition for allowance. Accordingly, Claim 15 is believed to be in condition for allowance.

New claims 69 and 72 are believed to be allowable in view of all cited art. Representative new claim 69 is:

69. (New) A method for optimizing readahead data retrieval for a storage system, the method comprising:

receiving a client read request at the storage system for client-requested data;

*locating a plurality of readset data structures associated with the client-requested data;*

establishing a read stream corresponding to each readset data structure of the plurality of readset data structures;

selecting an amount of readahead data in response to a readset data structure of the plurality of readset data structures; and

retrieving the selected amount of readahead data from the data container.

Applicant respectfully urges that none of the cited art discloses Applicant's claimed *locating a plurality of readset data structures associated with the client-requested data*. Accordingly, new claims 69 and 70 are believed to be in condition for allowance.

All independent claims are believed to be in condition for allowance.

All dependent claims are dependent from independent claims which are believed to be in condition for allowance. Accordingly, all dependent claims are believed to be in condition for allowance.

Favorable action is respectfully solicited.

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,

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